

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Douglas R. Sanquineti Art Unit : 3664  
Serial No. : 10/726,278 Examiner : Jorge O. Peche  
Filed : December 2, 2003 Conf. No. : 3378  
Title : A BOUNDARY DETECTION ALGORITHM FOR EMBEDDED DEVICES

**MAIL STOP AMENDMENT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

RESPONSE TO OFFICE COMMUNICATION DATED DECEMBER 12, 2008

The Restriction Requirement dated January 10, 2008 (“Restriction Requirement”) identifies two groups of claims in the present application: Group I, including claims 1-27 and 36-40; and Group II, including claims 28-35. The Restriction Requirement also identifies four genera and multiple species within each of the four genera. The Office Communication dated December 12, 2008 (“Office Communication”) states that Applicant’s Response to Restriction Requirement filed February 11, 2008 is not fully responsive because it fails to identify the claims that correspond to the elected species. Responsive to the Office Communication, Applicant respectfully requests consideration of the following remarks.

Regarding the restriction requirement between Group I and Group II, Applicant elects the invention of Group I, including claims 1-27 and 36-40, drawn to methods for detecting a boundary crossing. This election is made without traverse.

Regarding the requirement to elect a species, Applicant elects Embodiment 4 of Genus III, including claims 1-27 and 36-40. This election is made with traverse. The Restriction Requirement states that “[t]he species are independent or distinct because for each genus, individual species are mutually exclusive.” Applicant respectfully disagrees.

Regarding restriction between mutually exclusive species, the M.P.E.P. provides that “to require restriction between claims limited to species, the claims must not overlap in scope.” M.P.E.P. 806.04(f). However, for each genus identified in the Restriction Requirement, claims to each species overlap in scope.

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With regard to Genus I, when the pre-selected response includes “determining a new jurisdiction entered as a result of the boundary crossing; loading a boundary for the new jurisdiction; and detecting a crossing of the new jurisdiction boundary” (Embodiment 1), the pre-selected response may also include “gathering information related to the boundary crossing” (Embodiment 2). For at least this reason, the species of Genus I are not mutually exclusive.

With regard to Genus II, when the gathered information is “sent over a wireless interface to a central server” (Embodiment 1), the gathered information can also be “stored on the device being monitored” (Embodiment 2). For at least this reason, the species of Genus II are not mutually exclusive.

With regard to Genus III, a method for detecting a boundary crossing that includes “[d]etermining a distance covered within a jurisdiction defined by the boundary” (Embodiment 1) may also include “determining an amount of fuel used within a jurisdiction defined by a boundary” (Embodiment 2), “determining statistics related to a jurisdiction defined by the boundary” (Embodiment 3), and/or “retrieving adjacent jurisdiction boundary data when a boundary crossing is indicated, with the adjacent jurisdiction boundary data defining rectangles associated with a boundary of an adjacent jurisdiction that is occupied after a boundary crossing” (Embodiment 4). For at least this reason, the species of Genus III are not mutually exclusive.

With regard to Genus IV, a system for detecting a crossing of a boundary that includes “a mobile transmitter operable to selectively send a message based on the position of the monitored device relative to the predetermined boundary” (Embodiment 1) may also include “a second processor operable to calculate the at least one angle of rotation and to rotate the original coordinates defining the predetermined boundary by the corresponding angle of rotation to generate the rotated coordinates prior to storing the at least one angle of rotation and the rotated coordinates in the memory” (Embodiment 2). For at least this reason, the species of Genus IV are not mutually exclusive.

In fact, for each genus identified in the Restriction Requirement, it is possible to implement a single embodiment that performs the operations of all of the identified “Embodiments.” Thus, the identified species are not mutually exclusive and Applicant respectfully requests that the requirement to elect a species be withdrawn.

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No fees are believed to be due. Please apply any charges or credits to Deposit Account No. 05-0765.

Respectfully submitted,

Date: January 9, 2009

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